

U.S. Patent App. No. 10/805,142  
Response and Amendment dated January 6, 2008  
Reply to Office Action mailed July 6, 2007  
Attorney Docket No. 022232-9074-01

## REMARKS/ARGUMENTS

### STATUS OF CLAIMS

Claims 1-20 are currently pending in this application. By this Amendment, claims 1 and 17 are amended, leaving claims 2-16, and 18-20 unchanged.

### INTERVIEW SUMMARY

On January 3, 2008, a telephonic Examiner's Interview was conducted between the Examiner and the undersigned Applicant's Representative, Christopher B. Austin. During the interview, the parties discussed the meaning of the phrase "vertically elongated". The parties also discussed alternatives to the phrase "vertically elongated," and the amendments hereby made to independent claims 1 and 17. The Examiner acknowledged that the amendments hereby made to independent claims 1 and 17 further distinguish these claims from Khrustalev et al. (discussed below).

### CLAIM REJECTIONS – 35 U.S.C. §112

On page 2 of the Office Action, claims 1-20 are rejected under 35 U.S.C. §112 first paragraph, as failing to comply with the written description requirement. On pages 2 and 3 of the Office Action, claims 1-20 are rejected under 35 U.S.C. §112 second paragraph, as failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. As indicated above, independent claims 1 and 17 are hereby amended to remove the phrases objected to by the Examiner. In light of these amendments, withdrawal of the 35 U.S.C. §112 rejections of claims 1-20 is respectfully requested.

### CLAIM REJECTIONS – 35 U.S.C. §102

On pages 3 and 4 of the Office Action, claims 1-3, 5, 11, 12, and 17-19 are rejected under 35 U.S.C. §102(a) as being anticipated by Khrustalev et al. (U.S. Patent No. 6,536,510).

Independent Claims

Claim 1 is hereby amended, and calls for:

A capillary assisted loop thermosiphon apparatus comprising:  
at least one evaporator connected by a vapor line to a condenser;  
a liquid line connecting the condenser and the evaporator;  
the evaporator has a height in a direction of gravity significantly  
greater than a width perpendicular to the height, and is positioned in the  
direction of gravity from the condenser such that the condenser supplies  
liquid under gravity induced pressure to the evaporator, and the  
evaporator has a vertical capillary wick in which liquid wicks in the  
direction of gravity.  
(Amendment marks not shown)

Claim 17 is also hereby amended, and calls for:

A capillary assisted loop thermosiphon apparatus comprising:  
at least one evaporator connected by a vapor line to a condenser;  
a liquid line connecting the condenser and the evaporator;  
the evaporator is positioned in the direction of gravity from the  
condenser such that the condenser supplies liquid under gravity induced  
pressure to the evaporator; and  
the evaporator has a height in a direction of gravity significantly  
greater than a width perpendicular to the height, and has at least a pair of  
sheets, with at least one of the sheets having a corresponding wick  
portion attached thereto to provide a vertical capillary wick in which  
liquid wicks in the direction of gravity.  
(Amendment marks not shown)

In contrast, Khrustalev et al. disclose a thermal bus that includes “two spaced-apart substantially horizontally oriented evaporators ... provided where each is substantially horizontally mounted in a support and positioned in thermal communication with at least one heat generating device. Each of the two elongate evaporators defines a central passageway having a liquid-working fluid entrance port and a vaporous-working fluid exit port and a capillary wick disposed on the walls of the central passageway.” (Col. 3, lines 20-30).

As discussed in the January 3, 2008 Examiner's Interview, Khrustalev et al. clearly teach evaporators having a height no different in size than the width of the evaporators. This stands in contrast to evaporators as claimed, in which the greater evaporator vertical height provides greater relative internal surface area where a vertical capillary wick (also claimed in claims 1 and 17) can exist and operate.

Accordingly, Khrustalev et al. fail to teach, describe, or suggest, among other things, a capillary assisted loop thermosiphon apparatus comprising at least one evaporator which "has a height in a direction of gravity significantly greater than a width perpendicular to the height, and is positioned in the direction of gravity from the condenser such that the condenser supplies liquid under gravity induced pressure to the evaporator," and "has a vertical capillary wick in which liquid wicks in the direction of gravity" as claimed in amended claim 1. Khrustalev et al. also fail to teach, describe, or suggest, among other things, a capillary assisted loop thermosiphon apparatus comprising at least one evaporator positioned in the direction of gravity from a condenser and having "a height in a direction of gravity significantly greater than a width perpendicular to the height," and "at least a pair of sheets, either or both of which are provided with a vertical capillary wick" as claimed in amended claim 17.

In light of these and other reasons not discussed herein, the Applicants respectfully submit that amended independent claims 1 and 17 are novel and non-obvious over Khrustalev et al. Withdrawal of the 35 U.S.C. §102(a) rejections of claims 1 and 17 in view of Khrustalev et al. is therefore respectfully requested.

#### Dependent Claims

Claims 2, 3, 5, 11, and 12 depend from claim 1, and are therefore allowable based upon amended claim 1 and upon other elements and features claimed in claims 2, 3, 5, 11, and 12 but not discussed herein. Claims 18 and 19 depend from claim 17, and are therefore allowable based upon amended claim 17 and upon other elements and features claimed in claims 18 and 19 but not discussed herein. Withdrawal of the 35 U.S.C. §102(a) rejections of claims 2, 3, 5, 11, 12, 18, and 19 is therefore respectfully requested.

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CONCLUSION

In view of the above, the Applicants respectfully request entry of the Amendment and allowance of pending claims 1-20. The Applicants also request that the Examiner contact the Attorney of record in the event such a call could advance prosecution of the present application.

Respectfully submitted,



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